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The proposal of partial sharing for link-sharing method of buffer in NoC router (Conference Paper)

Fukase, N.[a], Miura, Y.[a], Watanabe, S.[a], Rahman, M.M.H.[b]

[a]Shonan Institute of Technology, 1-1-25, Tsujido-Nishi-Kaigan, Fujisawa, Kanawawa, Japan
[b]Dept. of Computer Science, KICT, International Islamic University, Malaysia

Abstract

The memory is shared between multiple physical links by using the multi-port memory in the link sharing method of the wormhole routed network-on-chip architecture. By this link sharing method the communication performance is substantially improved with extra hardware cost. In this paper, we propose a partial sharing method of a memory by two physical links. It is shown that this limited capacity of memory sharing in this proposed partial sharing method significantly reduces the hardware cost with slight declination of hardware cost. © 2014 IEEE.

Author keywords

Interconnection network Multi-port memory Network-on-chip (NoC) Router

Indexed keywords

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